Flight

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Aerial Locomotion and Transport
OFFICIAL ORGAN OF THE AERO CLUB OF THE UNITED KINGDOM.

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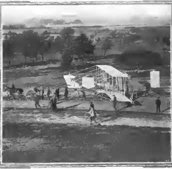

BRITISH ARMY AEROPLANE.—The new Army aeroplane constructed at Aldershot, en route between its shed and the trial ground at Farnborough on Saturday last, when Mr. Cody made a "flight" of about 30 yards at a height of about 10 feet. Mr. Cody, in a cap and gaiters, is seen to the left in the photograph.

FLIGHT.

44 ST. MARTIN'S LANE, LONDON, W.C.
Telegraphic address: Truditur, London. Telephone: [illegible] Gerrard.

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NOTICE.—Advertisement instructions should reach the office, 44, St. Martin's Lane, W.C., by first post, Thursday. The latest time for receiving small advertisements for Advertisements is 12 noon Thursday. No alterations can be made after that hour.

THE INTERNATIONAL CONFERENCE IN LONDON.

A good deal of public misapprehension has existed in advance as to the nature and therefore as to the importance of the Conference that has been held by the International Aeronautic Federation in London this week, and on the other hand a certain amount of confusion has arisen in the minds of a good many people between this Conference of Aero Clubs and a Congress which the French Government intend to call during the year to enable questions affecting International law to be discussed authoritatively by the nations of the world. Clearly, of course, the mutually self-recognising bodies which [illegible] represent the aeronautic movement in the various countries have no jurisdiction whatever in matters affecting the fresh legislation that will ere long be required in national as well as international law. But, for all that, the Conference of the past few days has been an event that will leave its mark for many a year to come upon the history of applied aeronautics and will for all time constitute one of the early [illegible] denoting that the era of flight had actually begun with this year of grace 1909. Initially the main object of the Congress at the time it was called was to adjudicate upon the relative claims of Switzerland and the United Kingdom with respect to the winning of the Gordon-Bennett Balloon Race in October last—an episode concerning which we do not feel called upon to comment in this column. But as a matter of fact, that portion of the actual agenda paper which formed the basis for the deliberations of the Conference will probably be deemed of least importance by the majority of people who are interested in the new sport that looks so promising for the near future. Everything of a retrospective kind at least sinks into complete insignificance when compared with the matters of future programme and policy which were subsequently mapped out, and unless we are very much mistaken indeed, the result of the London meeting will be to have advanced to an extent that has hitherto been impossible the cause of flight as an organised movement tending to commercial [illegible]. [illegible], the Federation has established itself on an almost unassailable basis as the consolidated body which will control the social and sporting side of [illegible] in all its branches. [illegible] an international bond of union and co-operation between the national Clubs of each individual country, and, moreover, [illegible] other than [illegible] the power and prestige of a single recognised organisation in each country which is so necessary for the organised and efficient representation of [illegible] here [illegible] while [illegible] ensuring unity of action [illegible] outside the immediate sphere of an organisation. There [illegible] whether the existing Aero Clubs intend to act as [illegible] aeroplanes and [illegible] developments [illegible] ballooning [illegible] substantial [illegible] of formation, that rules and regulations for [illegible] contests have been prepared [illegible] the competitions that are contemplated [illegible] already a special committee of [illegible] has been constituted for sketching out [illegible] well [illegible] when questions of legislation are brought to be [illegible]. From many points of view it is well that this first serious Conference should have been held in England [illegible] [illegible] bound to have for this country [illegible] at home the Federation as a whole [illegible] [illegible] by the Royal Automobile Club. One of the points which came up for consideration was that of the relations that are to exist between the comparatively newly-formed aero clubs and the powerful automobile clubs which have of course been in existence for quite a number of years [illegible]. The most significant resolutions which was adopted by the Conference was that of passing a vote of confidence in the French Aero Club as the aeronautic representative of France. Needless to say, the recent [illegible] of the Automobile Club de France, in [illegible] to arrogate to itself the functions of the French Aero Club was at the root of this question being raised, and equally evident is it we are glad to see that the Federation intends to throw its influence upon the side of the smaller body. That the position between the Aero Club of the United Kingdom and the R.A.C. is in marked contrast to that which prevails in France is something for which we in this country have to congratulate ourselves, and [illegible] good ground for hoping it will [illegible] of British aeronautics [illegible] from internal strife and dissension [illegible] the days [illegible] progress is assured [illegible]. But that, for all, is [illegible] subject which we have in hand this week, and must therefore be left at that until a future occasion. The real point to which attention has to be drawn is that a most successful Conference, bidding fair to bear the best of good fruit, has been held by the Fédération Internationale Aéronautique, and that [illegible] took place in England. In what has been said above we have indicated the nature of the deliberations and of the decisions that were arrived at, but, for all that, we would draw special attention to the details of the proceedings that appear elsewhere in this issue.

THE FIRST PARIS AERONAUTICAL SALON.

(Continued from page 25. [illegible])

ENGINES FOR AEROPLANES.

Types.

It is generally said that the development of the petrol engine has been the one factor which has made aeroplanes possible. Such, too, is indeed the case, but the truth of the saying applies in generalities only, and to the high-speed internal combustion engine as a principle rather than as a definite machine. The motor car engine is light for the power it develops, wonderfully light compared with ordinary steam engineering practice, but it is not considered light enough for experimental work in these early days of flight. Novel designs, therefore, are to be seen on every side, and there is hardly an instance in which the motor car type of engine has been accepted by the manufacturers of aeronautical machines.

The one exception that there is happens to be none other than the Wright engine made by the Barriquand and Marre firm, for it alone has four upright cylinders. All the rest are quite unorthodox, although some, like the Antoinette, have been sufficiently long in existence to have become a well-known type. The Antoinette has its cylinders arranged V fashion, and so do also the Renault, the E.N.V., and the J.A.P., the last named being the only British-built exhibit at the Show.

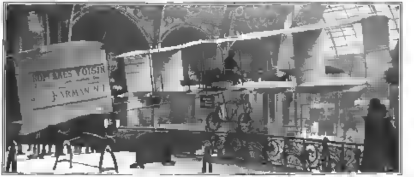
A leading idea which has very largely controlled the design of aero motors has been the necessity of making the engines run properly with only so much fly-wheel effect as they can obtain from the momentum of the propeller. A fly-wheel would in itself be regarded as so much useless weight on a flying machine, and makers have in consequence been called upon to dispense with it at any rate at the present time. The propeller mounted direct on the crank-shaft is doubtless a fair substitute, but one driven through a transmission chain cannot very well have any useful effect in such a capacity, owing to the slack of the chain intervening at the moment when the stored-up energy represented by the momentum of the fan is to be returned to the assistance of overcoming the inertia of the engine's moving parts.

It is in order to overcome the initial difficulty that the majority of aero motors have a large number of cylinders, the object of this being to spread the impulses as uniformly as possible over the two revolutions which go to complete the Otto cycle. In the larger Antoinette engine there are as many as sixteen cylinders, but the more usual number is eight in two lines of this pattern. Such a number gives a very even turning moment on the crank-shaft, and collectively they occupy but a moderate amount of space when arranged in this way.

Economy in overall length is, of course, a valuable feature in a light engine, because a long crank-shaft will not only be heavy in itself, but will need a large number of bearings to keep it from whipping, and these in turn will involve a big crank-chamber. It is very easy to understand, therefore, why an engine with radial cylinders should suggest itself as a desirable basis for the design of an aerial motor, inasmuch as with such an arrangement both the crank-chamber and the crank-shaft are utilised to their fullest extent. This type has been developed in the Clement-Bayard, Gnome, Farcot, and Gobron-Brillié engines, but not one of these four but has been modified in other directions as well. The Clement and the Farcot are arranged horizontally, the Gnome is a rotary engine—that is to say, its cylinders revolve bodily about a fixed crank-shaft—and the Gobron, instead of having its eight cylinders arranged radially in one plane, has them arranged in pairs so that they form a cross in appearance. The Gobron engine, it may be mentioned here, has sixteen pistons in its eight cylinders working on the usual Gobron principle.

Other makers who have favoured the radial principle have been deterred from adopting it completely by fear of lubrication troubles in connection with those cylinders which are inverted, and this has, of course, in part accounted for the horizontal disposition of two of the engines mentioned above, which are in other respects of the pure radial type. In order to get over the difficulty of having inverted cylinders while at the same time retaining certain advantages of the radial principle, M. Esnault Pelterie has adopted a design in which those cylinders which would ordinarily be inverted in such an engine are transferred *en bloc* to a position above the crank-chamber. Here they occupy a parallel plane, and assume positions which are midway between the other cylinders; they thus [illegible] essentially—though [illegible] effect—[illegible] engine

PARIS AERO SALON.—View from beneath of the Antoinette Monoplane, showing the lower girder frame which carries the tubular condenser near the front end.



PARIS AERO SALON. View of the Voisin Aeroplane built on the type of "Farman No. 1." The machine carries a dummy pilot and is mounted as if about to fly off into the Grand Nef.

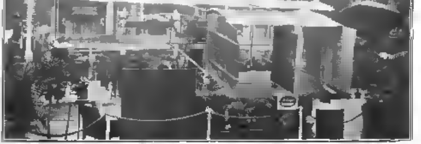
of the semi-radial type. In the R.E.P. models the engines have either five, seven, or ten cylinders, the last being virtually a doubled edition of the five. The use of five or seven cylinders simplifies the valve mechanism to a very great extent, as was described in *The Automotor Journal* of November 30th last. Another engine which is turned up so that all the cylinders are set radially about the upper half of the base chamber is the De Korwin motor made by Buchet. The Anzani engine has three radial cylinders arranged close together in one plane.

Forged Steel v. Cast Iron

A feature of aeroplane engine construction which was very marked at the Paris Salon, and is the more interesting because it has no parallel in motor car engineering, is the use of steel cylinders forged in one piece with their heads and valve chambers. Steel cylinders, as our readers know, are used by a few prominent makers of cars, but in such cases they are invariably separate from the cylinder heads, and are virtually nothing more than a simple tube. In aeronautic engines such as the new Antoinette, the steel cylinder is quite a different thing altogether, for it is, as has been mentioned, forged solid with its own head and valve-chamber. There is only one [illegible] properly speaking, in the Antoinette engine [illegible] induction valve is of the atmospheric type and is mounted independently under an aluminium cap. When the cylinder is first forged, the valve-chamber which is to be is, of course, solid, and it has to be bored out in readiness to receive the valves, and a passage has to be made between it and the combustion-chamber in the cylinder. Other engines in which forged steel cylinders are used are the Clement-Bayard, the Gnome, and the Wright engine made by Barriquand and Marre.

Air v. Water Cooling

The two main classifications into which aero motors fall at the present moment are respectively air-cooled and water-cooled types. So far as the exhibits at the Paris Salon go, the representatives of both are fairly equally divided. Among the water-cooled class are the Antoinette, Clement-Bayard, Gobron, Wright, E.N.V. and one of the J.A.P. models, while in the air-cooled category is the other J.A.P., the R.E.P., Anzani, De Korwin (Buchet), Gnome, [illegible], and Renault. In dealing with air-cooled engines it is necessary to draw attention to those which rely upon natural convection currents to [illegible]



PARIS AERO SALON.—Rear view of the large Aeroplane built by Voisin. This illustration shows the box-kite tail and the rudder which is not visible in the photograph of the Farman machine (above).

and those which utilise a forced circulation. Under this latter heading come the last three motors mentioned above. The Gnome is a rotary motor and its cylinders therefore whirl round in the air; the Farcot has stationary cylinders set horizontally with a direct-driven fan mounted above them; the Renault is a V engine and induces a draught about its cylinders by the use of a fan and piping.

Although the Antoinette has been mentioned above as belonging to the water-cooled class, it should as a matter of fact be placed in a category by itself which might not inappropriately be termed "steam-cooled." The latest Antoinette system [illegible] with a small amount of water [illegible] that it quickly boils, and they provide an aluminium condenser to condense the steam thus formed. This condenser forms part of the Antoinette installation for their own aeroplanes, but in the ordinary way the purchaser has the option of buying the engine separately and using an ordinary radiator with a larger supply of water.

Light Water Jackets

Where water-cooling is employed every effort is of course made that the cylinder jackets shall be as light as possible. In two cases—the Antoinette and E.N.V.—the jackets are formed by electrolytically deposited copper; that is to say, the cylinders are first prepared with a thick coating of wax to represent the water space and to form a surface upon which the copper can grow in the electrolytic bath. The wax surface is coated with black lead to act as a conductive medium for the [illegible] the copper, and when the jacket is finished the wax is of course melted out to leave a hollow space for the water.

On the Gobron and Clement engines tubular brass jackets are employed, and in the latter case these are shrunk in their places. On the Wright engine made by Barriquand and Marre, the jackets are aluminium tubes.

Combined Valves

Another expedient for reducing the weight which has been adopted by some makers is the use of a valve which combines the purposes of an induction valve and an exhaust valve in one. Such a device is to be found on the R.E.P. engine and also on the Farcot, but it cannot be said to have come into general practice as yet. Those makers who have adopted the principle have done so, of course, because they object to the atmospheric valve such as is used on the Antoinette and some other engines, and also because they wish to effect the saving of some of the parts involved in the operation of two separate valves by mechanical means.

In the case of the R.E.P. the operation of the two separate valves would be all the more complicated on account of the arrangement of the cylinders, but the combined valve enables a very neat design of operating mechanism to be introduced. The Wright, J.A.P., E.N.V. and Renault engines have mechanically-operated inlet and exhaust valves. The Gnome rotary engine has an atmospheric valve in the piston and a mechanically operated exhaust valve in the centre of the cylinder head. In several cases—the R.E.P. among them—the exhaust is allowed to blow straight out into the air without even passing through the shortest of pipes; in the case of the Gnome engine, the gases even impinge direct upon the valve operating rock lever.

(To be concluded.)

* * * *

TABLE OF FLIGHT MOTORS AT THE PARIS SALON

Type	Cyls.	Bore	Stroke	R.P.M.	Weight	B.H.P. Rating	Kilogs. per h.p.	Lbs. per h.p.	Remarks
Water Cooled		mm.	mm.		kgs.	h.p.			
20 Antoinette	8	80	80	1400	42	32	3	2 [illegible]	V type, atmospheric inlet-valves, injected fuel, steam cooling
50 Antoinette	8	[illegible]	05	1100	95	60	6	3 5	
50 Antoinette	8	80	80	1400	75	64	[illegible]	2 6	
100 Antoinette	8	[illegible]	05	1100	20	20	0	2 [illegible]	
60 J.A.P.	8	00	110	1300	138	40	3 5	[illegible] 6	V type, mechanical valves.
50 Clement-Bayard	7	100	5	[illegible]	70	43	6	3 6	Horizontal radial, mechanical valves.
[illegible] Wright (B. & M.)	4	108	10	1200	80	29	2 8	6 1	Vertical, mechanical valves.
80 Gobron	8	20	200	1400	160	72	1 2	4 9	X type, mechanical valves, 16 pistons.
[illegible] E.N.V.	8	00	130	1000	150	50	3 0	6 6	V type, mechanical valves.
58 Dutheil-Chalmers			—	—	08		—		Horizontal opposed
[illegible]							—	—	Model of [illegible] type engine.
Air-Cooled									
30 [illegible]	5	85	95	600	5 5	22	2 4	5 3	Semi-radial, combined mechanical valve.
30 [illegible]		85	9	600	68	3	2 3	4 8	
50 R[illegible]	10	85	9	600	97	4	2 2	4 7	
[illegible] J.A.P.	[illegible]	85	9	1500	00	36	2 [illegible]	6 1	V type, mechanical valves.
50 Anzani	3	15	154	1200	[illegible]9	34	3 2	7 0	Semi-radial, atmospheric inlet valve.
30 [illegible] (Bucher)	6	80	80	800	9[illegible]	2	[illegible]	4 6	Semi-radial.
50 Farcot	8				60				[illegible] mechanical valves.
With Fan									
45 Renault	8	90	120	500	145	40	3 6	8 0	V type, mechanical valves, enclosed fan.
[illegible] Farcot	8	105	20	200	110	55	2 0	4 4	Horizontal radial, combined mechanical valve, open fan.
50 Gnome	[illegible]	1 0	20	1200	75	52	4	3 2	Rotary radial, atmospheric inlet valve in piston.

A Professor of Aeronautics

Although there has been a good deal of talk with regard to founding a chair of aeronautics at various universities, we believe the first professor of aeronautics is Professor Prandtl, who has been appointed in Germany to lecture on the complete science of aeronautics at Göttingen University.

"Travel and Exploration"

Is the title of a new monthly magazine which is to deal with questions relating to touring and exploring on land and sea and in the air. In the first number, which has just been published, the features likely most to interest our readers are an article dealing with the history and achievements of dirigible balloons, which is contributed by Mr. F. [illegible] S. Bruce, and some notes on aerial flight showing why progress has not been made in this country by Mr. H. Massac Buist. Some hints on motoring in snow are also from the pen of Mr. Buist. The new magazine is very interesting, and the many photographs with which it is illustrated are well reproduced, so that it should be assured of a large public.

NEWS OF THE WEEK.

International Aeronautic Federation in London.

THE International Aeronautic Federation commenced its sittings in London at the Hotel Ritz on Monday, January 11th, when Mr. Roger W. Wallace, K.C., Chairman of the Aero Club of the U.K., presided in the absence of Prince Roland Bonaparte. Forty delegates were nominated by their respective countries to attend. The first day's sitting occupied some five hours, and was principally devoted to the appeal of the British Aero Club against the award of the Gordon-Bennett Balloon Cup to Colonel Schaeck's "Helvetia." The conference, however, did not support the protest, and the award to Switzerland was therefore confirmed. The full items on the agenda paper for discussion at the conference were as follows:—

1. The question of admitting the Aero Club of Odessa as representing Russia.
2. Discussion of the appeal of the Aero Club of the United Kingdom against the decision of the Berlin Aero Club in awarding the Gordon-Bennett long-distance prize to Colonel Schaeck's balloon "Helvetia."
3. Modification of the [illegible] the various aero clubs of each country in the Federation.
4. Relations between the aero clubs and automobile clubs of different countries.
5. Discussion and adoption of rules and regulations governing dirigible balloon and aeroplane contests.
6. To consider rules governing the Gordon-Bennett Aviation Cup Race, 1909.
7. Report of the committee [illegible] regulations of the Federation.

The following is the official text of the minute in which the conference expressed this resolution relating to the Gordon Bennett Race:—

The International Conference meeting in London in the matter of the Gordon-Bennett balloon race declares: That having taken note of the official award of the German Club, whereby Colonel Schaeck was necessarily on a point of law declared the winner, having considered the various proposals submitted to the conference, some of which suggested the annulment of the race, while others suggested that the first place should be awarded to Mr. John Dunville, and that Colonel Schaeck should be disqualified, regrets that the obligatory interpretation of its rules prevents this conference from giving a retroactive effect to the decision of May 27th, 1908, and also regrets that, having before him the propositions put forward in a perfect spirit of sport by the Aero Club of the United Kingdom, Colonel Schaeck should have expressed his willingness that the first prize should be awarded to the club which had protested against him, provided that he himself were awarded a place in the race and to accept the division with Mr. Dunville of the sum of 12,500 fr., this attitude is deplored by the conference [illegible] Club.

At Tuesday's meeting, a proposal was put before the conference by Belgium that the Federation should found an International prize fund to the value of £48,000, with proportionate subscriptions from the different countries, England, America, France and Germany to give £8,000 each. The proposal was accepted in principle, and, if possible, will be carried through. A committee of three military, naval and legal experts, from each affiliated Club, was appointed to report on the question of regulating flight by International law.

On the question of proportionate representation on the F.A.I. a resolution was passed by which the delegates will be proportionate to the relative aeronautical activities of the country they represent. A vote of confidence in the French Aero Club as representing aviation in France was passed.

In connection with the friction which has taken place between the Aero Club of France and the Automobile Club of France, the following proposal by Mr. Roger Wallace on behalf of America was carried:—"The International Federation decides that any affiliated aeronautical club is free to act in its own country and can enter into any arrangement with another organisation, but only on condition that it maintains in all its integrity the fundamental statutes of the Federation." This resolution, besides being a vote of confidence in the French Club

INTERNATIONAL AERONAUTICAL CONFERENCE, LONDON, JANUARY 11th, 12th and 13th, 1909.—Meeting of the Delegates to the Conference at the Ritz Hotel. See Key Plan on opposite page.

making the [illegible] of national aeronautical [illegible] the suggestion [illegible] of each country.

The French [illegible] [illegible] as as [illegible] [illegible] [illegible] "adopted" and the [illegible] [illegible] [illegible] Exhibition this year. In the meantime [illegible] [illegible] was appointed to report on the rules.

A list of the names of delegates who attended the Conference and other information [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] on this page [illegible] the official [illegible] [illegible]

Monoplane Passenger Flight.

For the first time in the history of aviation a monoplane [illegible] [illegible] [illegible] made a successful flight with a passenger. The event took place on Tuesday, [illegible] at Issy-les-Moulineaux, when M. [illegible] [illegible] [illegible] [illegible] [illegible] through the air for a distance of half a kilometre. [illegible] [illegible] [illegible] flights [illegible] [illegible] [illegible] kilometres, and [illegible] the trials were brought to a sudden conclusion on Wednesday by the breaking of one of the wings while attempting a too sudden turning.

The Gasnier Aeroplane

Readers [illegible] [illegible] [illegible] [illegible] [illegible] *L'Aérophile* [illegible] of November 1909, [illegible] has reconstructed his aeroplane [illegible] the accident, and [illegible] [illegible] making experiments at [illegible] [illegible] [illegible] The machine has [illegible] square [illegible] surface and [illegible] spread [illegible] [illegible] [illegible] [illegible] [illegible] metres in overall length. Equipped with [illegible] 50-h.p. Antoinette engine, it weighs 400 kilogs. in running order. [illegible] [illegible] [illegible] [illegible] [illegible] and [illegible] horizontal tail.

Vermossl Aeroplane

M. VERMOSSL, an engineer at [illegible], has had an aeroplane constructed for experimental purposes. [illegible] [illegible] [illegible] selected [illegible] is stated that the engine is capable of developing 40 h.p. and weighs 78 kilogs.

Bernard Aeroplane

M. BERNARD, of Vichy, is reported to be constructing an aeroplane of an entirely novel character which he designates by the term *multiplan* [illegible] because it is designed [illegible] [illegible] [illegible] [illegible] and longitudinal stability. In addition, it is to be equipped with a special system of propellers which are [illegible] and to give a better starting effect.

Zatopp Aeroplane.

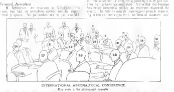
M. ZATOPP, a Russian civil engineer, is reported to have [illegible] a flight [illegible] [illegible] at Saint Vaast-la-Crau [illegible] aeroplane which is not equipped with an engine, but [illegible] [illegible] [illegible] [illegible] [illegible]

The Lepause Aeroplane

The aeroplane which is being built by M. Lepause at Brussels and which is to be called an *aerosmall* [illegible] [illegible] metres in length and has a span of only [illegible] metres. It is said to be equipped with a gas turbine and [illegible] [illegible] apparatus only weighs 70 kilogs.

Farman's Anniversary in Flight

Wednesday of this week, January 13th, was the anniversary of the first Grand Prix of the Air which Henry Farman won by making a flight of 1 kilom. in a closed circuit. The prize of 50,000 francs was established by MM. Deutsch de la Meurthe and Ernest Archdeacon, and the winning of it was just considered to mark the beginning of a new era in aviation. Always will the pioneers strive to make a record flight, and it seems almost [illegible] to [illegible] only a few years ago there was no official record of [illegible] with an apparently simple performance having been accomplished. Since that day Farman has made wonderful strides as everyone expected he would. In [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]



INTERNATIONAL AERONAUTICAL CONFERENCE.

Key plan to the photograph opposite

1. H. LYON-CAEN and 2. H. [illegible] (*Secretaries of the Conference*). 3. [illegible] [illegible] (*France*). 4. COMTE DE LA VAULX (*France*). 5. ROGER W. WALLACE, K.C. (*Chairman Aero Club U.K. and President of the Conference*). 6. PROF. [illegible] (*Germany*). 7. *Reporter*. 8. VICE-ADMIRAL SIR CHARLES CAMPBELL, K.C.M.G. 9. HON. C. S. ROLLS. 10. CAPT. KINDELAN (*Spain*). 11. J. T. C. MOORE-BRABAZON. 12. H. [illegible] (*Germany*). 13. PROF. L. K. HUNTINGTON. 14. [illegible] [illegible] (*Germany*). 15. COL. SCHAECK (*Switzerland*). 16. CAPT. [illegible] (*Netherlands*). 17. CAPT. HILDEBRANDT (*Germany*). 18. E. [illegible] (*Germany*). 19. H. [illegible] (*Germany*). 20. JOHN DUNVILLE. 21. C. F. POLLOCK. 22. LORD ROYSTON. 23. CMT. VIVES (*Spain*). 24. H. [illegible] (*Germany*). 25. H. [illegible] (*Germany*). 26. BARON [illegible] (*Belgium*). 27. V. KER-SEYMER. 28. MARTIN DALE. 29. ERNEST C. BUCKNALL.

on the last day of October he won the French Aero Club prize for high flight by clearing an obstacle of 25 metres. Perhaps the flight for which his name is most likely to go down to history, however, is that which he made between Bouy and Rheims on October 30th, for this was the first occasion on which man has ever flown from one town to another. The longest flight which Henry Farman has hitherto executed is one of just over 40 kilos. in a duration of 44 mins. 30 secs., and was made on October 2nd.

Farman Triplane Sold.

HENRY FARMAN has sold his triplane to some purchasers who do not wish to have their names made known at the present moment. The sale was effected on Tuesday, January 5th, at Mourmelon-le-Grand after a demonstration trial. The machine, it is interesting to note, was sold as a triplane, although Farman repeatedly used it as a biplane. It is equipped with an Antoinette engine.

Farman's New Machine.

HAVING sold his triplane, Farman is putting in hand at Chalons two or three new machines; the first will be a triplane built on lighter lines than that just sold; the second will be of a different type, and figures still at present; no information is available as to what the third will be like. The smaller of the two proposed machines will have an engine of not more than 25 to 30-h.p., and a feature of its arrangement will be such that it will operate with either one or two propellers running at 600 r.p.m.

It is stated that Henry Farman is about to take out patents on his machines.

Maurice Farman's Aeroplane.

THE aeroplane which Maurice Farman, brother of the famous Henry Farman, is having built for himself, will be constructed by Maurice Mallet. It is a biplane with a 10-metre span, and carries the engine and the pilot's seat on a central beam. In front is an elevator and behind is a rudder; means are also provided for warping the planes. Two engines have been chosen with which trials are to be made, one a 30-h.p. R.E.P. and the other a 50-h.p. Renault. It is probable that the machine will be equipped with two propellers driven by chains. The machine is expected to weigh 250 kilogs. without the motor or propellers. Except for the rudder there are no vertical surfaces on the machine.

British Army Aeroplane "Flies" 50 Yards.

PILOTED by Mr. Cody, the British Army aeroplane succeeded, on Saturday, January 9th, in flying a matter of 50 yards on the Farnborough Common. During the course of its brief flight it attained an altitude of about 10 feet, but at no time did the machine look very happy in the air, for it was obviously too heavy in the stern. This, according to Mr. Cody, was due to the arrangement of the radiators behind the pilot, and he explains that when these are shifted forward he will be able to make a more successful effort.

We publish this week two very interesting photographs of the machine taken on the occasion of its trial on Saturday. One shows the biplane, which measures over 50 feet span, being drawn to the scene of operations, and the other shows it in the air at a very sharp angle to the ground.

Robart Aeroplane.

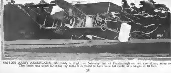
M. HENRI ROBART, of Amiens, has recommenced his flying experiments with a new aeroplane weighing 400 kilogs., and fitted with a 40-h.p. Antoinette engine. The surface is 30 sq. metres, and the engine drives two centrifugal propellers through chains. The propellers are 2.32 metres in diameter and 3 metres in width.

De Caters' Aeroplane.

BARON DE CATERS, who has entered for the kilometre prize instituted by the Belgian Aero Club, succeeded in accomplishing a few flights of about 100 metres in length at Brecht on December 30th. Foggy weather brought his trials to a conclusion.

Delagrange on Heavy Weights.

THERE is already the beginning of much difference of opinion in technical circles as to the ultimate use of light aviation motors, and M. Delagrange is taking the initiative on the side of the heavier weights by making practical experiments with them. He has equipped his aeroplane with a 50-h.p. Chenu engine weighing 3 kilogs. per horse-power, and has already made some short flights with it. It only remains for him to accomplish a long flight successfully to turn everyone's attention in this new direction.



BRITISH ARMY AEROPLANE. Mr. Cody in flight on Saturday last at Farnborough on the new Army aeroplane. This flight was about 50 yards (by some it is stated to have been 60 yards) at a height of 10 feet.

Orville Wright on the Cost of Upkeep.

SPEAKING to a press representative before he left America to join his brother Wilbur in France, Orville Wright made the interesting statement that an aeroplane flies faster, is cheaper to run, and is more easily handled than any other machine. Airships will have their uses, but can never be as practicable as aeroplanes. If all these things are true—and Orville Wright ought to know as well as anyone—there is not only going to be a very great future for the aeroplane, but it is going to come very quickly, for in these hard times an appeal to the pocket is heeded by all, and there never was a date in the history of man when the [illegible] of speed did not set hearts beating faster. The only thing that is a stumbling block are the [illegible] a little doubt as to whether these same aeroplanes are really far more easily handled than any other machines.

Orville Wright at Plymouth.

B[illegible] the [illegible] such [illegible] the "Kaiser Wilhelm der Grosse" on Monday, January [illegible], Orville Wright had little more to say on the occasion [illegible] with the representatives of the English press who came to see him. Speaking on the subject of commercial flying machines, he said that he did not think they would come into general use for commercial purposes, although he was convinced that they would largely take the place of yachts and motor cars for pleasure. He was equally [illegible] in stating that "Most assuredly in ten years the conquest of the air will be accomplished, and it is my belief that the aeroplane will have made greater strides in popularity than has the motor car in the past decade."

Orville Wright has not yet recovered from his accident and [illegible] to think it will be a year before he is quite right again. Orville himself, however, wants to fly in three months, although he has no intention of taking any undue risks; moreover, he has the vigilant eye of his sister Katherine on him to see that he attempts nothing rash at the present moment.

Wright Aeroplane Makers.

Two firms have been selected to undertake the construction of the Wright aeroplanes for M. Lazare Weiller's Company, the Cie. Générale de Navigation Aérienne. One of these firms is the Chantiers de France, of Dunkirk, and the other is the [illegible] Astra, of Billancourt. The [illegible] rights have been acquired by M. Michel Clemenceau, son of the well-known French Minister, who has, according to the latest information, given an order for twenty-five machines.

Aeroplane Experiments in America.

SEVERAL experiments with the new aeroplane "Silver Dart," described in our last issue, were made on December 6th, when three short flights were accomplished. The machine was also out again on Dec. [illegible], and some tests were made with [illegible] on board. These were brought to a conclusion by a slight accident. Soon after the aeroplane rose a few feet from the ground, however, it dipped to one side, bringing one of the wings into contact with the earth. This caused the machine to swing round suddenly, resulting in the wheels being smashed. It is thought that the apparatus got out of control owing to the gyroscopic action set up by the 50-h.p. motor driving the single propeller.

Aero Club of France Affiliations.

THE Aero Club of France has just accepted the affiliation of two important aeronautic societies, one being the [illegible] of Paris, and the other the Aero Club de l'Ouest, which has its head-quarters at Angers.

Official Pilots.

THE Pilots' Flight Certificate of the Aero Club of France has been [illegible] Messrs. Wilbur Wright, Orville Wright, Henry Farman, Delagrange, Blériot, Santos Dumont, Esnault Pelterie, and Captain Ferber.

The rules under which these certificates are issued have been compiled by the Aviation Committee of the Aero Club of France.

Prize for Aero Motors.

THE Commission d'Aviation of the Aero Club of France has drawn up the rules for a prize to be offered for aero motors. It will consist of a sum of [illegible] frs. and will be awarded to the maker of the engine which was used on the aeroplane which has achieved the record distance flight up to the end of this year. A sum of [illegible] frs. will be awarded under similar conditions as second [illegible]

These prizes have been presented by M. [illegible] and M. Robert [illegible] respectively.

L.N. Pupils.

THE Ligue Nationale Aérienne has evidently no intention of perishing with the passing away of the present generation. It has founded a committee of pupil pilots, who are recruited from the engineers-to-be of the well-known technical schools. Among those who have joined are 80 students from the Polytechnic, 50 from the Central School, and a large number from the Mining School. In order to enable the boys to witness practical experiments, certain days have been set apart for them at the Juvisy aerodrome.

The L.N. at Douai.

A BRANCH of the Ligue Nationale has been founded at Douai. M. Louis Breguet, MM. René Quinton and Ernest Archdeacon opened a conference at the Hippodrome there on Sunday last, January [illegible], when the subject of aerial navigation was discussed.

T.C.F. Aerial Tourists.

RECOGNISING that the object of the Touring Club of France is the development of touring in all its forms, that body has just created a *Comité de Tourisme Aérien* under the Presidency of M. Leon Barthou, with MM. Leon Chaix and Paul Renard as Vice-Presidents. The preliminary work for the new section will constitute the study of matters relating to the preparation of suitable maps and guides to [illegible], garages, &c., and of information relating to legislation, general regulations and Customs formalities. In evidence of its practical interest in the movement, it has inaugurated its formation by subscribing [illegible] to the fund opened by the Aeronautic Club for the founding of the Mechanics Prize, which was recently referred to in *The Automotor Journal*.

Aviation Committee in Belgium.

THE Belgian Aeronautic Club has formed an Aviation Committee to further the interests of mechanical flight in that country. The Committee consists of Baron de Crawhez, who has been elected President, and Baron de Caters, Baron Joseph de Crawhez, Count de Liedekerke, and MM. Jacobs, H. d'Oultremont, R. Goldschmidt, d'Aoust, E. Solvay, and P. de Vasseot.

Ligue Méridionale Aérienne.

THE chief officers of the L. M. A. have been elected as follows:—President, M. C. F. Baudry, President of the Aéro Club du Sud-Ouest; Vice-Presidents, MM. F. Saulier, E. Sriven, Vicomte de Cuzay, and A. Salgues; Secretary, M. J. Avril.

Monaco Flight Meeting.

LITTLE more than a week has to elapse before the opening date of the first aviation competition which the world has [illegible] is due to commence at Monaco. Already nine aeroplanes have been entered for the big event, which consists, as our readers know, of flying from the Monaco Quay across the bay round Cap Martin and back again. The meeting is under the organisation of the International Sporting Club of Monaco, and will be held under the rules of the International Federation. The right to make flights in this competition will remain in force until March 24th. It is significant that Wilbur Wright has not yet notified his intention of taking part. The following are the machines at present engaged:—

	Pilot.	Aeroplane.	Type.	Engine.
1	Lieut. Bourgeois	Antoinette	Monoplane	Antoinette
2	[illegible]	Santos-Dumont 19	Monoplane	Antoinette
3	R. Demanest	Antoinette V	Monoplane	Antoinette
4	Delagrange	Voisin	Biplane	Chenu
5	Delagrange	Voisin	Biplane	Antoinette
6	L. Breguet	Breguet-Richet 2b	Helicopter-Aeroplane	Gnome
7	L. Breguet	Breguet	Biplane	Gnome
8	Baron de Caters	Voisin	Biplane	
9	[illegible] Vuitton	Vuitton-Huber	Helicopter	

In Aid of Messina.

M. GEORGES PRADE, the well-known French journalist, has written an open letter in his paper *Les Sports* to M. Jean Dupuy, President of the *Syndicat de la Presse Parisienne*, suggesting that that body should organise an aviation meeting on the Longchamps Racecourse on January 24th in support of the Messina Relief Fund. The date suggested is one on which the racecourse would be available for the purpose, and the letter urges the Society to obtain permission to use it, and to do everything in its power to ensure the attendance of as many aeroplanes and airships for all Paris to see.

If this project is carried through successfully it would doubtless have the twofold effect of raising a very considerable sum for a charitable and deserving purpose, and also of giving a further impetus to the public mind to the cause of flight. Already several aviators have tentatively promised assistance.

Anjou Cup.

ON Saturday evening, January 9th, a committee meeting was held in the Angers Town Hall under the chairmanship of the Mayor, Dr. Monprofit, to discuss the much talked of aviation week of Anjou, to replace the Circuit d'Anjou motor race. The organisation of the event is to be under the control of the Aéro Club de France working in conjunction with the Aéro Club de l'Ouest, and the principal event of the meeting would of course be the proposed Angers-Saumur race for aeroplanes. In addition there would probably be some form of demonstration with spherical balloons, and it is also suggested that an event taking place between Angers and Nantes would be acceptable to the inhabitants of the latter town. In the meantime the Aéro Club de l'Ouest has undertaken the preparation of draft proposals which will form a basis for future discussion. Some date between September [illegible]th and 30th, 1909, was [illegible] suitable time for the meeting to take place.

Juvisy Aerodrome Under Snow.

ONCE more has the Société d'[illegible] Locomotion Aérienne [illegible] been forced to postpone the opening of the [illegible], this time owing to the ground being covered in snow. No date is at present fixed for the inauguration, but any case the invitation cards already issued will hold good for the ceremony when it occurs.

Wilbur Wright will not Fly at Juvisy.

[illegible] that Wilbur Wright will give a demonstration flight at Juvisy before he leaves for Pau. There, however, is no truth in the [illegible], and he has definitely said that it is impossible for him to do so.

The Aerodrome at Pau.

AT Pau Wilbur Wright will have a wonderful natural aerodrome to experiment on, and according to all accounts he should be further blessed with more propitious weather, for the climate and the winds in that part of the Béarn district are usually of the mildest description. Already the aeroplane shed has been erected, the site chosen being in the middle of the Pont Long moors. The shed has been made large enough to accommodate several aeroplanes, and contains private rooms and a workshop. It is about 10 kiloms. from Pau, and lies north of Lescar. The moors on which it is placed stretch for a distance of 30 kilometres, and are devoid of trees, houses, and cultivation.

Thither Wilbur Wright will be accompanied by his brother Orville and his sister Katherine, besides his three pupils. M. Paul Tissandier, who is one of them, has already sent on his machine to Pau, and it is probable that experiments will be commenced on the [illegible] of this month.

Aero Exhibits at Agricultural Hall.

IN connection with the Cordingley Motor Exhibition and Market, which is to be held in March next at the Agricultural Hall, there will again be an aero section. We are informed that one or two prominent aviators have promised [illegible] their [illegible] to the exhibits, which should therefore be more interesting than has been the case with previous displays here.

Aviation in Spain.

THE King of Spain is apparently anxious that his country should not be behind others in the realm of flight, and as a preliminary to further progress he is dispatching Captain Kindelan and another officer to France and America this [illegible] to investigate what is going on in those countries. In the meantime a society is being formed at Barcelona termed the Asociación de Locomoción Aérea. The President is Señor C. [illegible] Solas, and the Committee includes Messrs. F. del Villar, J. Marchesi, C. J. de Guillén-García, [illegible] Sojo, J. Pa[illegible], and J. Sauda.

French Army Airship Specification.

THE military authorities have asked through the medium of the different societies concerned for designs to be submitted to them of an airship to comply with the following specification:—*Speed*, [illegible] kilometres an hour for 15 hours with a load of six passengers, having an average weight of 75 kilogs.; *maximum altitude*, 2,000 metres; *maximum volume*, 6,500 cubic metres; *maximum length*, 90 metres; *maximum height*, 20 metres; *maximum diameter*, 13 metres. Trials will be made over a 500-kilom. circuit in wind up to 7 metres per second, and will last 15 hours without descending. They will be [illegible] at a [illegible] not exceeding 1,500 metres during [illegible] of the voyage and places specified in advance will [illegible] be [illegible]bed.

A prize of [illegible],000 francs will be awarded to the winner of the competition and other prizes will be allotted according to classification. The winner will be given the order for the construction of a duplicate or duplicates for the Government.

Public Garage for Dirigibles.

An interesting project is on foot in Belgium, where a wealthy manufacturer, M. [illegible]vay, who, it is stated, has been backed up by Prince Albert of Belgium, has decided to build an immense shed at Jemeppe for dirigibles and airships. Large stores of hydrogen will be available for the inflation of envelopes and arrangements made for carrying on other kinds of work in connection with them. It is stated that the Company has ordered two dirigibles from France as part of their stock in trade, and that one of their engineers, M. Lepousse, is experimenting with an aeroplane of peculiar construction. What their ultimate full programme is to be is not at present quite evident.

Germany's Airship Garage.

GERMANY is also contemplating the erection of a vast shed for her airships, but in this case it naturally

International Aeronautic Federation

Conference Royal Automobile Club London 12th January 1909

R. W. Wallace

Busley

Fernand Jacobs

Frank Hedges Butler

A. R. Castillon de St Victor

Col. P. Vives y Vich

Baron [illegible] van Zuylen van Nyevelt

Lieutenant D'Ode

A. K. Huntington

J. T. C. Moore-Brabazon

Colonel Schaeck

Dr Stade

Jul. Wurmbach

Alfredo Kindelan

Ernest C. Bucknall

Harold E. Perrin

E. Mummery Capt

Pierre Gasnier

Ernest Hall

Stanley Spooner

John H. Ledeboer

Rousseau

Ferber

Adhémar de la Hault

Lieutenant G. Oesterreich

INTERNATIONAL AERONAUTICAL FEDERATION.—Signatures of those present at the Luncheon to the Delegates of the Conference given at the Royal Automobile Club on Tuesday, January 12th.

assumes more of a national aspect. Those of the Zeppelin type are, as our readers know, housed in floating sheds, but the suggested new garage would be erected at Friedrichshafen on land.

Schutte Airship

No further particulars, beyond those published in *The Automotor Journal* on December 26th, are available in respect to the Schutte airship, which has been designed by a Professor of the Danzig Technical High School on lines suggested by a Berlin architect named Reitig. Much importance, however, is being attached by those interested to the wooden framework which is being employed, for in other respects it is very evident that the airship is to follow closely on Zeppelin lines. It has been sought to show that the Zeppelin disaster was caused by a self-generated electric discharge from the aluminium framework, and on these grounds the use of wood in the Schutte dirigible is assumed to be a vast improvement. American pine is the selected material.

Siemens-Schuckert Airship.

The information which was published in *The Automotor Journal* of November 28th to the effect that the famous Siemens-Schuckert firm were about to take up the construction of airships is materialising in the further news that they have already decided upon the dimensions of the new vessel, which is to be built under the supervision of Captain von Krogh. The envelope will be of the ordinary non-rigid type, having a volume of [illegible] cubic metres, with a length of [illegible] metres and a diameter of [illegible] metres. It will be propelled by engines developing [illegible] h.p., and there will be at least two, and perhaps three, passenger cars.

Consulting Aviation Engineers

It seems early days yet for aviation to have consulting engineers. But here are some people who are ever on the move with the times, and thus there are generally to be found a few who depart from a rigorously conservative policy in these matters. Messrs. Markham and Prince are a case in point at the present time, for they inform us they have laid themselves out to deal with this new industry in the same way as they have done with automobile matters on land and on sea. Among other duties which they will undertake is to secure any make of flying machine which their clients may wish to possess, and as all the well-known machines happen unfortunately to be in France at the present time, those of our readers who may be thinking of obtaining a Wright or a Voisin for experimental purposes may find the services of Messrs. Markham and Prince a considerable saving of time and trouble.

Church bans Flight

It General Kovanko, one of the speakers at the annual meeting of the Russian Aero Club, has been correctly reported, it would appear as though the Orthodox Church is opposed to the study of aviation. It seems also, although the secret has been well kept, that Russia has a peasant who can easily beat Wright and Farman at their own game. He is said to have had the audacity to fly over a church in the aeroplane he has invented, and for this sacrilegious act he was prosecuted by the priest, condemned to be burnt, and [illegible] by the local ecclesiastical council. We ought to hear more of him—or the reporter.

◆ ◆ ◆ ◆

Aeronautical Patents

Applied for in 1907

Published [illegible]

[illegible]

Applied for in [illegible]

[illegible]

[illegible]

[illegible]

◆ ◆ ◆ ◆ ◆

AEROPLANE CLUB DINNER

The first annual dinner of the Aeroplane Club of Great Britain and Ireland was held at the Savoy Hotel on Wednesday night, Mr. Horridge, K.C., M.P., being in the chair. Among the company present, which numbered 160, were Capt. Ferber, of the French Army, Major Baden-Powell, Mr. T. W. B. Hutchinson, Mr. Roger Wallace, K.C., the President of the Aero Club of the U.K., the [illegible] Col. H. S. Massy, C.B., Sir [illegible] Champion de Crespigny, [illegible] Mark Mayhew and Major Templer.

◆ ◆ ◆ ◆ ◆

CONTINENTAL "FABRIC."

One of the most important branches of the automobile industry is filled by the Continental Tyre Co., who have made a speciality of the production of surface materials which are constructed on the same lines as their famous balloon fabric. Altogether they have over [illegible] types of material in their standard range of patterns, and of these three in particular are at present specially designed for aeroplane use. The lightest weighs 121 grammes per square metre, and has a tensile strength of 850 kilogs. per metre; it is suited to the surface of experimental gliders.

The next fabric weighs 145 grammes per square metre, and has a strength of 1,000 kilogs. [illegible] used on the Farman aeroplane. The third and strongest aeroplane surface weighs 190 grammes per square metre, and has a strength of 1,350 kilogs.; this pattern is strong enough for any big aeroplane which is [illegible] at present in existence.

All the above-mentioned fabrics consist of a single layer of Egyptian cotton, and have one surface treated with rubber. The type of fabric employed for spherical balloons has two layers of cotton arranged diagonally; it weighs 260 grammes per square metre, and has a strength of [illegible] kilogs. For airships, on the other hand, the two layers have their threads parallel, and the material weighs 330 grammes per metre for a strength of 2,900 kilogs. This latter is such as is used on the Ville de Paris. In the balloon and airship fabrics there is a rubber surface between the layers and another on the inside of the finished envelope. The outside of the envelope is coloured yellow in order to better resist the decomposing effects of light.

EXTRAORDINARY CONFERENCE OF THE FEDERATION AERONAUTIQUE INTERNATIONALE, HELD IN LONDON ON JANUARY 11TH AND 12TH, 1909.

(Officially communicated by the Secretary of the Aero Club of the U.K.)

Federation Aeronautique Internationale DELEGATES.

FRANCE.
Comte de Castillon de Saint-Victor
M. Ferber
M. Pierre Gasnier
Count de la Vaulx
M. Ernest Zens
M. Paul Rousseau

BELGIUM.
Baron [illegible] Zuylen
Adhémar de la Hault
Fernand Jacobs

SWITZERLAND.
Col. Schaeck

GERMANY.
Prof. Busley
Lieut.-Col. Moedebeck
Capt. Hildebrandt
Herr Stade
Herr Eschenbach
Herr Hiedemann
Herr Wurmbach
G. M. Hermann
F. Clouth
H. Maas
[illegible]
H. Oesterreich

SPAIN.
Col. Vives y Vich
Capt. Kindelan

AERO CLUB OF THE UNITED KINGDOM.
Ernest C. Bucknall
Vice-Admiral Sir Charles Campbell, K.C.M.G., C.B., D.S.O.
Col. J. E. Capper, C.B., R.E.
Major [illegible]
Prof. A. K. Huntington
[illegible] Seymour
C. F. Pollock
Hon. C. S. Rolls
Viscount Royston
[illegible]

AMERICA.
Roger W. Wallace, K.C.

At the meeting of the Delegates of the F.A.I., on the invitation of Roger W. Wallace, K.C., Comte de la Vaulx, Prof. Busley and M. Fernand Jacobs, at the Ritz Hotel on Monday, January 11th, 1909, in the absence of M. Georges Besançon, who was prevented from attending through illness, Mr. J. F. Ledeboer was appointed to act as Secretary for the F.A.I. during the present Conference.

In the absence also of Prince Roland Bonaparte, President of the F.A.I., Mr. Roger W. Wallace, K.C., took the chair at the Conference that opened at 2.30 p.m.

The application for admission to the F.A.I. of the Aero Club of Odessa as representing Russia was considered, and it was decided to postpone the admission until the next Conference.

The following official resolutions were passed:—

Gordon Bennett Balloon Race.

The International Conference meeting to decide the winner of the Gordon Bennett Balloon Race declares:—

That having taken note of the official award of the German Club's jury, by which Col. Schaeck was, exclusively on a point of law, declared the winner;

That having considered the various proposals submitted to the meeting, some of which suggested the annulment of the race, whilst others suggested that the first place should be awarded to Mr. John Dunville and that Col. Schaeck should be disqualified, rejects;

That the interpretation of its rules prevents this Conference from giving retroactive effect to the decision of May 27th, 1908, further agrees;

That having before it the proposal put forward in a perfect spirit of sport by the Aero Club of the United Kingdom, Col. Schaeck should have expressed his willingness that the first prize should be awarded to the Aero Club which had protested against him, provided that he himself were awarded a place in the team and accept the division with Mr. Dunville of the sum of 12,000 frs. This solution is deplored by the Conference, which nevertheless confirms the classification of the German Club.

The Definite Settlement of the General Regulations of Dirigible Balloon and Aviation Contests.

The regulations drawn up and presented by the Aero Club de France were provisionally adopted. A commission consisting of Comte de la Vaulx, Lieut.-Col. Moedebeck, Paul [illegible] and [illegible], was appointed to edit these regulations, and to report thereon to the next Conference of the F.A.I.

The Settlement of the General Rules for the Gordon Bennett Aviation Cup of 1909.

The rules drawn up and presented to the Conference by the Aero Club de France were provisionally approved.

The following special conditions apply to the contest for the present year:—

The contest to be held on a [illegible] the [illegible] attempting a perimeter of [illegible] 5 kilometres, the total distance of [illegible] 20 kilometres from starting post to the finishing post. No [illegible] will be allowed to return to the ground after starting, under [illegible].

Prizes of £48,000.

On the proposal of the Aero Club de Belgique the Conference approved the creation of an international prize amounting to £18,000 divided [illegible] dirigible balloons and flying machines.

The Aero Club of America proposed that the Conference of the F.A.I. should approve the creation of a commission empowered to discuss with the various [illegible] the creation of International laws of the rights of individuals and the State in the regulation of traffic so far as the continental navigation. The commission to consist of three members from each affiliated Club, to include one military representative, one naval representative, and one legal representative.

Gordon Bennett Balloon Race.

It was unanimously decided to postpone the close of entries for the Gordon Bennett Balloon Race from February 1st to May 15th, 1909, and the Swiss Aero Club was empowered to [illegible] with the Swiss Aero Club [illegible] with a view to holding the next Contest in Switzerland in connection with the Gordon Bennett Balloon Race instead of at Milan as previously arranged.

Luncheon to the Delegates.

Mr. Frank H. Butler entertained the Delegates to lunch at the Royal Automobile Club on Tuesday, Jan. 12th.

Banquet to the Delegates.

Mr. Roger W. Wallace, K.C., Chairman of the Aero Club of the United Kingdom, entertained the Delegates at the Café Imperial at the close of the Conference. Amongst the speakers were Count Wrangel, the Swedish Ambassador, Sir David Salomons, Count de la Vaulx, Prof. Busley, Col. J. E. Capper, Col. Schaeck, Lt.-Col. Moedebeck and Mr. F. Jacobs.

CORRESPONDENCE

The name and address of the writer [illegible] accompany [illegible] publication [illegible] in all [illegible] letters intended for [illegible] either or [illegible]

THE USUAL THING

To the Editor of FLIGHT.

SIR,—I am sending you herewith [illegible] from a leading [illegible] contemporary [illegible] to-day's [illegible] should have [illegible] you [illegible] Is [illegible] disagreeable [illegible] find their way into this paper? It is owing [illegible] that England was so far behind in the early days of the motor industry. [illegible] a new industry, perhaps you [illegible] refer to the article in your paper.

Yours faithfully,

January 7th. [illegible] T. W[illegible]

The following are a few typical extracts from the article in question—an article, by the way, which we are glad to see was promptly "exposed" in the *Morning Post* the day after it had appeared in the evening paper:—

> [illegible] in a home at present [illegible] aeroplane [illegible]
>
> Of course [illegible] are here and to see people enthusiastic [illegible] undertakings in which they think they [illegible]
>
> Such indulgence [illegible] may be amusing as a pastime, but to my mind it will be long before [illegible] aeroplane otherwise than as a means for [illegible] sensation.
>
> The space an aeroplane occupies precludes [illegible] home. It makes it use in large cities [illegible] more or less confined to the parks and property of wealthy owners. Even in warfare [illegible] claims are made for the aeroplane, [illegible] target [illegible] for the use of such an appliance [illegible]
>
> *I understand that the Aeronautical Society has acquired a stretch of ground of considerable size for experimental purposes.*
>
> No doubt during the coming year [illegible] become fashionable to try and [illegible] experience by [illegible] many of whom will [illegible] to have large [illegible]

[As will be seen there is a good deal of "I" about it, as well as much haughty patronage for which the poor pioneer in a new field should, of course, be humbly grateful. But probably in a similarly superior strain, ere long, when all the real hard work has been done, this self-same writer will be found graciously condescending to derive some pecuniary benefit to himself out of the valuable assets built up by those he now seeks to rebuke.—ED.]

AN APPRECIATION

To the Editor of FLIGHT.

SIR,—I have [illegible] the [illegible] number of [illegible] new journal [illegible] and would like to congratulate you on the happy selection [illegible] name [illegible] with the aspect [illegible] of [illegible] word "Flight" [illegible] and comprehensive [illegible] and in pondering [illegible] the subject of flight, my mind reverts to the ancient record [illegible] of things when "There was light." And [illegible] the sequence of Creation with [illegible] earth was made and the darkness [illegible] man who has the power to evolve [illegible] from his [illegible] condition [illegible] creature [illegible] himself with [illegible] and stones [illegible] against the [illegible] himself against the animal world [illegible] through [illegible] Cave-man [illegible] devising weapons and tools [illegible] food, [illegible] requirements for filling the [illegible] and [illegible] wild beasts, [illegible] with [illegible] fellow [illegible] to gain what the other [illegible] laboured for. The race [illegible] the Flint Age [illegible] through various periods, in the shape of spear-heads [illegible] with corresponding [illegible] shields and armour [illegible] Villainous saltpetre [illegible] explosives, mines, guns, [illegible] to the present century, when we find ourselves [illegible] with [illegible] weapons, both of offence and defence. [illegible] suddenly we arrive at the dawn of another period—that of flight. And what may it not mean? Either universal [illegible] or [illegible] Clever writers, like Wells, have [illegible] horrors that cannot be contemplated of flight" [illegible] Tennyson:—

Heard the heavens fill with shouting,
And there rained a ghastly dew
From the nations' airy navies
Grappling in the central blue.

We hope we can hope otherwise [illegible] the Old Bard, the Psalmist asks for "the wings of a dove" in order that he might be at rest. So let us at this time remember [illegible] as the harbinger of peace and goodwill toward men.

Wishing you every success with your new venture,

I remain, yours faithfully,

January 8th. [illegible] THORNTON.

PROGRESS IN FLIGHT

To the Editor of FLIGHT.

SIR,—In Mr. Jack Humphreys' [illegible] I read the words "What of Wren[illegible]"

May I ask who [illegible] of him? Mr. Jack Humphreys seems very [illegible] with him because he [illegible] orderly [illegible] and then in the next paragraph says [illegible] and is prepared to do everything that [illegible]

Why then does he not come [illegible] himself, since he is prepared to make machines [illegible] people in England English ready.

I suppose a [illegible] propeller is one of the [illegible] they know most about in France?

Yours truly,

J. T. C. MOORE-BRABAZON.

AN ENGINE FOR MODELS.

To the Editor of FLIGHT.

SIR,—Referring to the letter of Mr. [illegible] in your issue of [illegible], I should be [illegible] particulars of your correspondent's engine, its power, weight, and how many cylinders [illegible]

Yours faithfully,

[illegible] W. O. S.

P.S.—I am delighted with your paper.

HOLYHEAD TO DUBLIN BY AEROPLANE.

To the Editor of FLIGHT.

SIR,—Mr. Wilbur Wright has succeeded in flying a distance of almost eighty miles.

This is more than sufficient to cover the stretch of water between Holyhead and Dublin, and [illegible] that a successful flight between the two places would [illegible] an immense amount of interest, and undoubtedly afford an exciting experience to thousands of Irish people who would congregate in Dublin to see the first of those who attempt the trip [illegible] Phoenix Park.

The idea, we feel sure, would prove attractive to aeroplanists, and if sufficient inducement were offered, no doubt Mr. Wright [illegible] some other flyer would attempt a leap.

We should be glad to contribute £[illegible] to a prize [illegible] who accomplishes this feat during the year [illegible] hope that [illegible] in Ireland, and especially those interested in the [illegible] of a real flight, will [illegible] a large sum.

Yours, &c.,

[illegible] PRESS [illegible] LTD.

[illegible]

* * *

ANSWERS TO CORRESPONDENTS

W. M. (Rotherham).—We will endeavour to take the matter up, and shall also be glad [illegible] of your machine when [illegible] able to [illegible] them.

[illegible] (Highgate).—As particulars are [illegible] your idea will be treated with [illegible] confidence. We shall be happy to give you our advice and opinion.

L. N. N. (Stockwell).—We note your views and will bear in mind your wishes.

C. F. (Holloway).—We much appreciate your congratulations. Your letter has been forwarded as requested.

H. H. G. (Putney).—Many thanks for hearty welcome. The time is, we fear, barely ripe for carrying out your suggestion, but at the same time we are fully mindful of our mission.

W. O. S. (London, E.C.).—We very much esteem your expression of satisfaction. Any information concerning your own machine would be very welcome.